



NASA Education Future: Partnerships

“Realizing the Vision!”



John M. Hairston, Jr.
Assistant Administrator for Education (Acting)

NASA Education Partnerships Forum - September 12, 2006



NASA Education Future: Partnerships “Realizing the Vision!”

Vision for Space Exploration

- **Goal**
- To advance U.S. scientific, security, and economic interest through a robust space exploration program.
- **Objectives**
 - Implement a sustained and affordable human and robotic program to explore the Solar System and beyond.
 - Extend human presence across the solar system, starting with human return to the moon.
 - Develop innovative technologies, knowledge and infrastructures
 - Promote International and Commercial partnerships in exploration.



NASA Education Future: Partnerships “Realizing the Vision!”

NASA's Mission

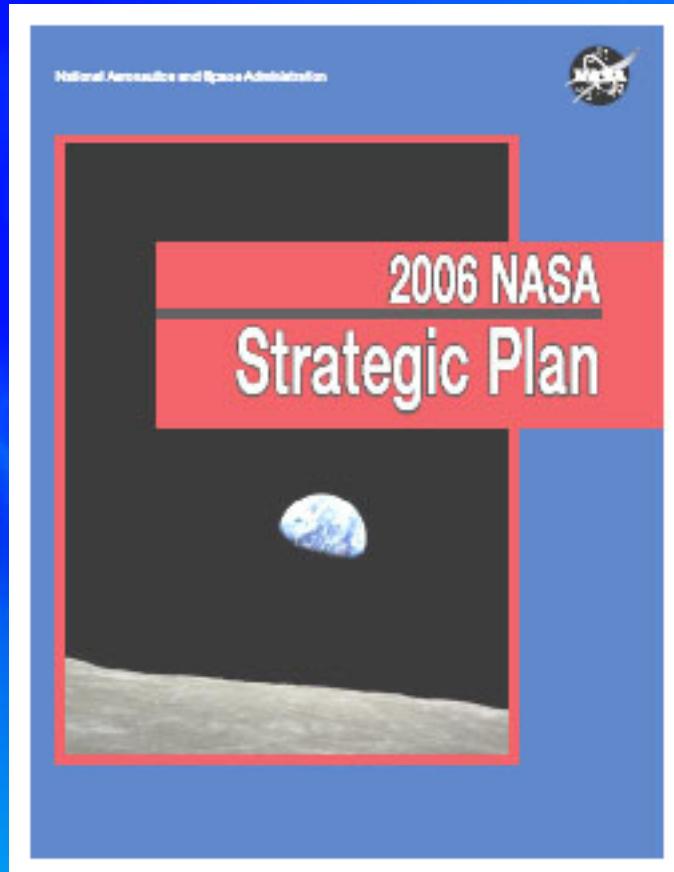


**To pioneer the future in
space exploration, scientific
discovery, and aeronautics
research.**



NASA Education Future: Partnerships “Realizing the Vision!”

2006 NASA Strategic Plan





NASA Education Future: Partnerships
“Realizing the Vision!”

NASA's Strategic Goal 1

Fly the Shuttle as safely as possible until its retirement

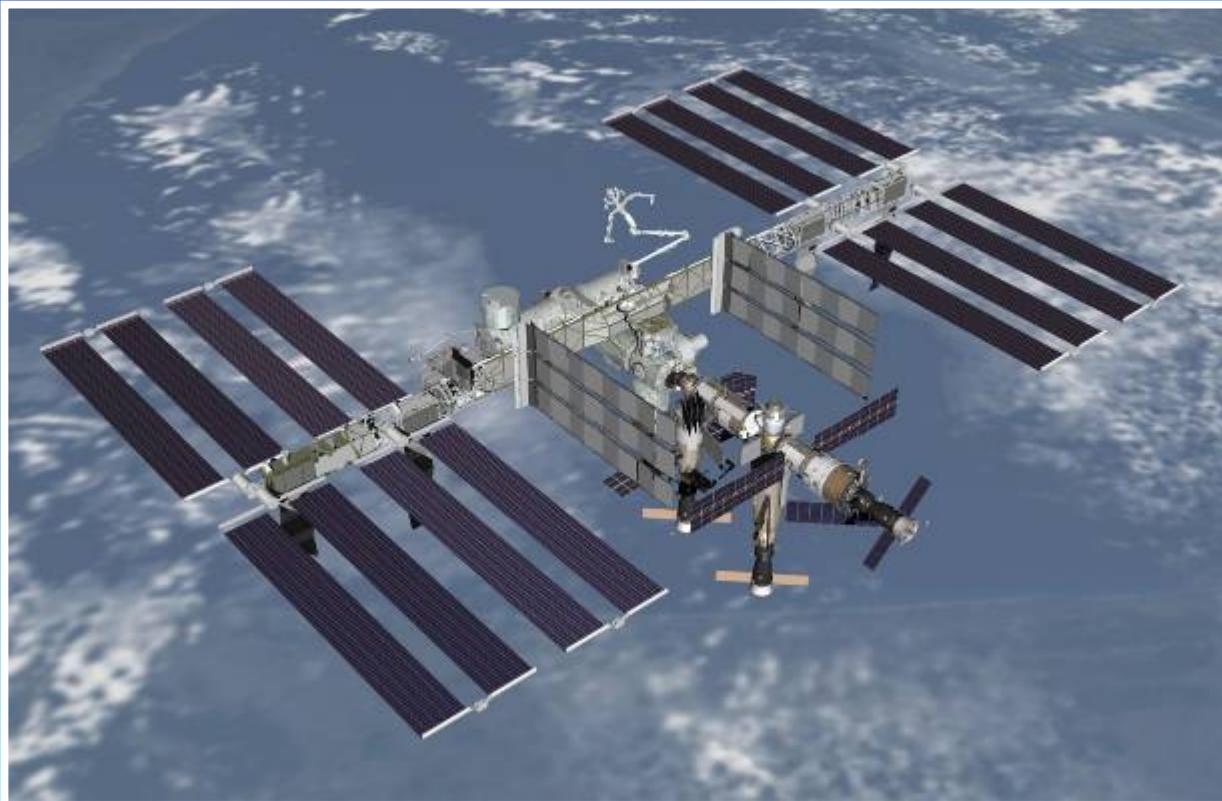




NASA Education Future: Partnerships
“Realizing the Vision!”

NASA's Strategic Goal 2

Complete the International Space Station





NASA Education Future: Partnerships “Realizing the Vision!”



NASA Strategic Goal 3

Develop a balanced overall program of science, exploration, and aeronautics to focus on exploration





NASA Education Future: Partnerships
“Realizing the Vision!”

NASA's Strategic Goal 4

Develop a new Crew Exploration Vehicles





NASA Education Future: Partnerships
“Realizing the Vision!”



NASA Strategic Goal 5

Encourage the pursuit of appropriate partnerships with
the emerging commercial space sector



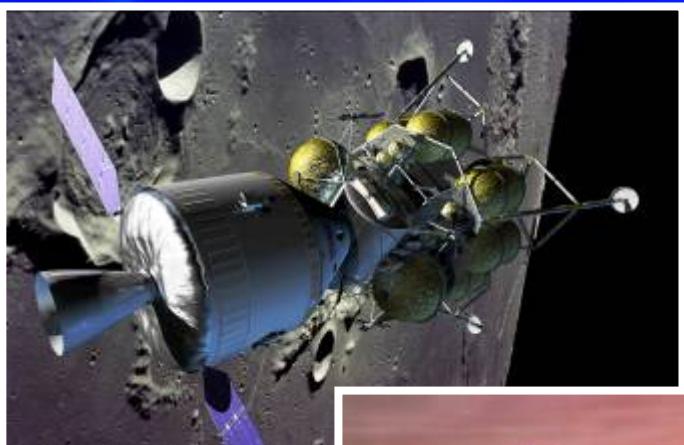


NASA Education Future: Partnerships “Realizing the Vision!”



NASA Strategic Goal 6

Establish a lunar return program having the maximum possible utility for later missions to Mars and other destinations



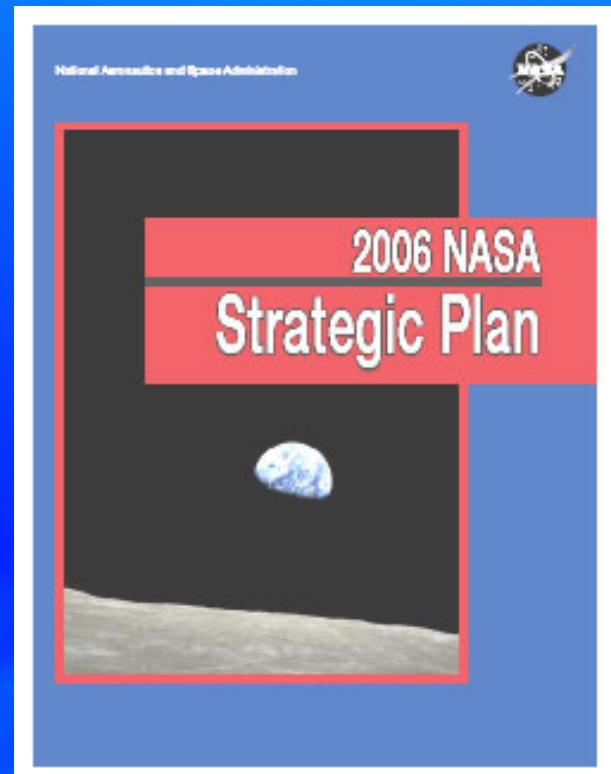


NASA Education Future: Partnerships “Realizing the Vision!”



Strategic Communications: Stakeholder Outreach

- *NASA is committed to communication with key partners and stakeholders, including elected public officials, the media, the public, academia, other government agencies, and international space agencies, to enhance understanding of the Agency's programs, policies and plans and to advance the Nation's space program agenda.*
- *NASA Strategic communications initiatives include focus efforts in:*
 - *Legislative Affairs*
 - *Public Affairs*
 - *External Relations*
 - *Education*
- *Coordinated Agency-wide to ensure a consistent NASA message.*



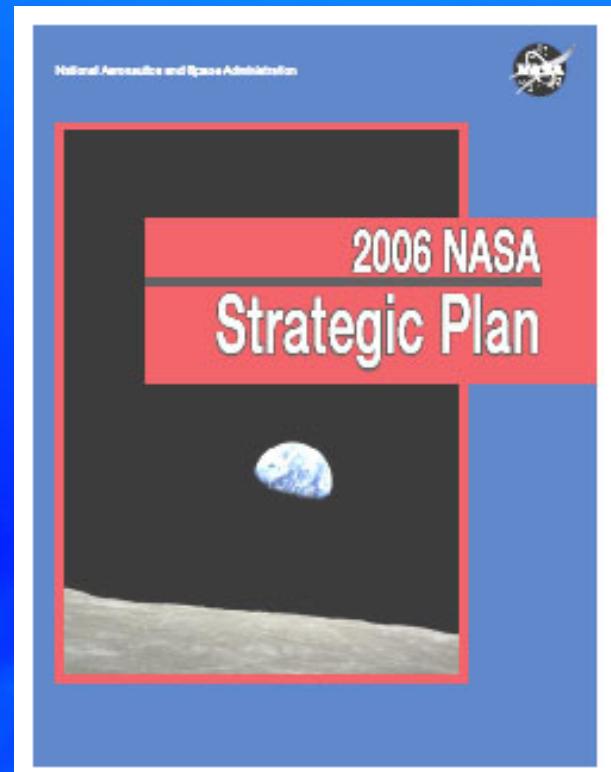
NASA 2006 Strategic Plan



NASA Education Future: Partnerships “Realizing the Vision!”

Strategic Communications: Education Initiatives

- **NASA will continue the Agency's tradition of investing in the Nation's education programs and supporting the country's educators who play a key role in preparing, inspiring, exciting, encouraging, and nurturing the young minds of today who will manage and lead the Nation's laboratories and research centers of tomorrow.**
- *In 2006 and beyond, NASA will continue to pursue three major education goals:*
 - *Strengthen NASA and the Nation's future workforce.*
 - *Attract and retain students in STEM disciplines.*
 - *Engage Americans in NASA's mission.*
- **As the United States begins the second century of flight, the Nation must maintain its commitment to excellence in STEM education to ensure that the next generation of Americans can accept the full measure of their roles and responsibilities in shaping the future.**



NASA 2006 Strategic Plan



NASA Education Future: Partnerships “Realizing the Vision!”



Post-PA&E Study Administrator Directions

National Aeronautics and
Space Administration
Office of the Administrator
Washington, DC 20546-0001



October 21, 2005

TO: Officials-in-Charge of Headquarters Offices
Directors, NASA Centers

FROM: Administrator

SUBJECT: NASA Education Activities

I met recently with Joe Davis, Chief of Strategic Communications, and other senior Agency leaders to review the Agency's Education activities. Our discussion followed the Program Analysis and Evaluation Office's assessment of NASA Education activities.

Based on that discussion, I have asked Joe and his team to bring a detailed implementation plan for NASA's Education investments to the Strategic Management Council. This plan will include:

- A clear education implementation plan mapped to the Agency Strategic Plan that supports the Vision for Space Exploration and our ongoing science and aeronautics activities.
- A clearly defined and coordinated portfolio approach to NASA Education (including all of the education and educational outreach activities and investments at NASA Centers and within the Mission Directorates).
- A clearly defined description of the relationships and responsibilities pertaining to education for the Office of Education, all Mission Directorates, and all NASA Centers to promote coordination and collaboration among these entities.
- A well defined evaluation component of the implementation plan to ensure that NASA's education activities are measured for effectiveness against the Agency's strategic goals.

This plan will serve as the framework for NASA's education activities in the coming years. I view NASA's Education activities to be an integral element in achieving the Agency's strategic goals, and I look to you and your staff to support Joe and his team in contributing to the development of this critical plan.



Map to the Agency Strategic Plan



Clearly defined and coordinated portfolio approach



Clearly defined roles and responsibilities to promote coordination



Well-defined evaluation plan



Response to Administrator's Direction

1. Align with Agency Strategic Plan

- Education Outcomes → FY06 Agency Strategic Plan
- Strategic Framework → Portfolio mapping and realignment
→ Informed FY06 & FY07 budget realignments

2. Clearly defined roles and responsibilities to promote coordination

- Portfolio Coordination Framework
- Roles and Responsibilities Defined
- Education Coordinating Committee (ECC) →

3. Clearly defined and coordinated portfolio approach

- Top-level portfolio mapped to Strategic Framework
- Detailed portfolio map →
- Portfolio realignment → '08 budget submission

ECC Working Groups

- Portfolio
- Database
- Evaluation
- Outreach/ Partners
- Program Mgmt.
- Earmarks

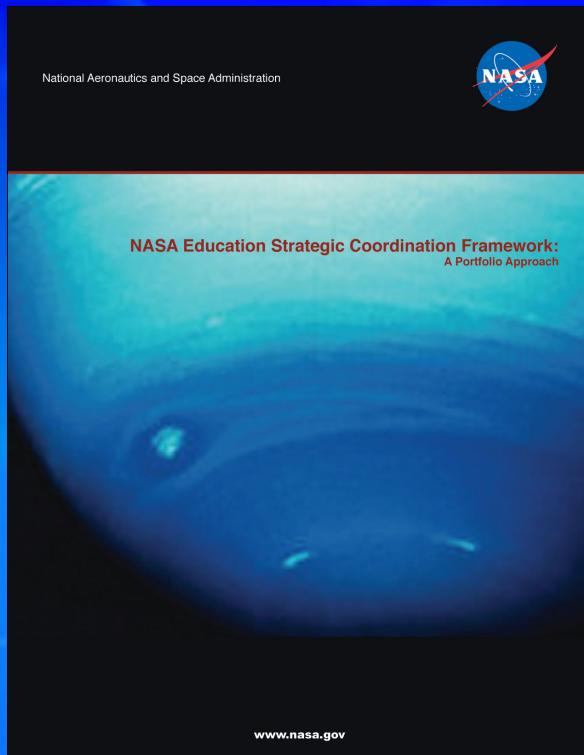
4. Well-defined evaluation component

- Strategy and principles
- Issue definition
- Detailed Agency-wide guidance



NASA Education Future: Partnerships “Realizing the Vision!”

A Portfolio Approach



NASA Education Framework

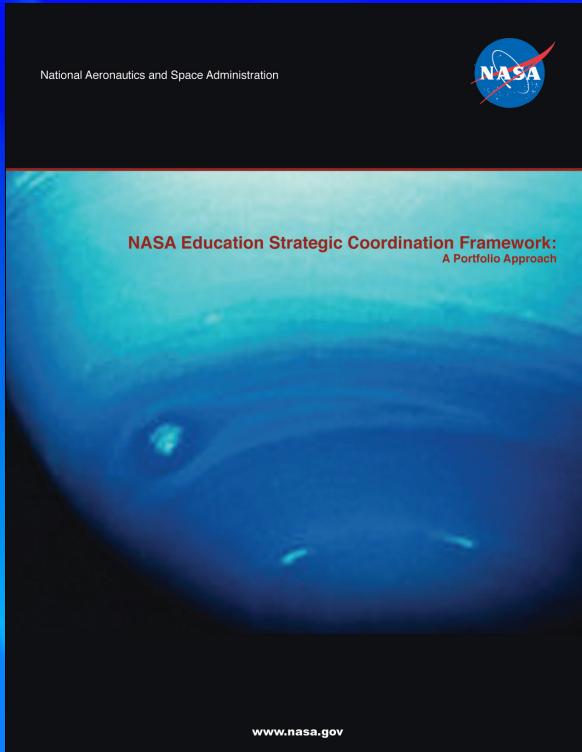
The NASA Education Strategic Coordination Framework defines the operational methodology, the role of key officials and entities, and the coordination structure for all NASA education efforts. The purpose of the framework is to present the following:

- Alignment of NASA education with the Agency Strategic Plan.
- A framework and specific and measurable outcomes to guide the education portfolio.
- Principles by which NASA education is managed.
- Roles and responsibilities of the Assistant Administrator for Education, The Office of Education, Mission Directorate Education Leads, and Center Education Offices.
- Guideline consistent with government requirements for strategic planning.



NASA Education Future: Partnerships “Realizing the Vision!”

A Portfolio Approach



NASA Education Framework

- Key Agency stakeholders responsible for strategic coordination and requirements development.
- Processes by which strategy is converted into implementation outcomes.
- Guidance for implementation offices to execute programs and projects.
- Approaches for goals, measurements, and feedback on progress.
- A monitoring and control structure for determining the impacts and outcomes of NASA's education portfolio across the Agency.
- Approved by NASA's Strategic Management Council on February 23, 2006.

Adopted as the framework for all NASA's education programs, projects, products and activities by the Education Coordinating Committee on February 24, 2006.



Outcomes for the 2006 Strategic Plan

Task: Align with the three Education Goals:

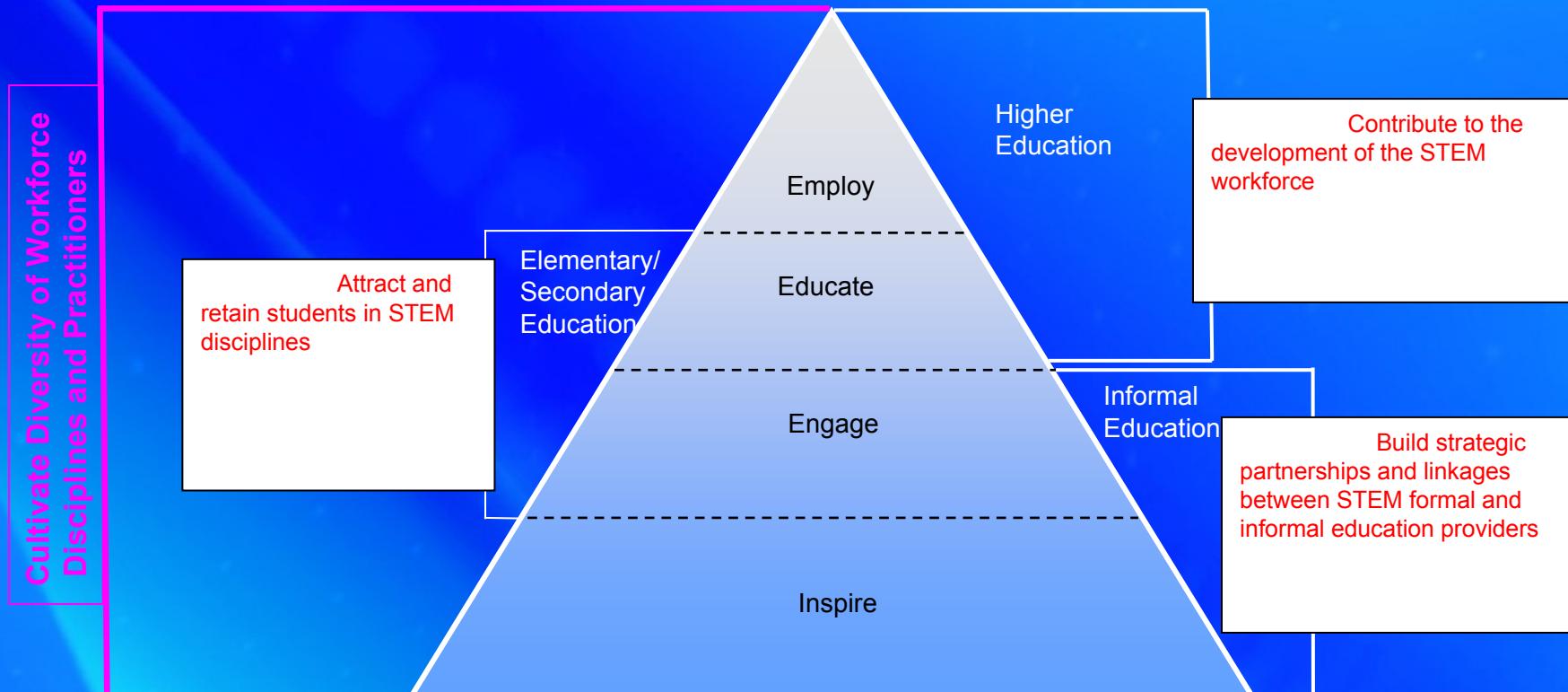
- **Workforce Development**
 - **Strengthening the Pipeline**
 - **Public Benefit**
-
- The NASA Education portfolio is guided by three desired outcomes:
 - Outcome 1: Contribute to the development of the STEM workforce in disciplines needed to achieve NASA's strategic goals, through a portfolio of investments.
 - Outcome 2: Attract and retain students in STEM disciplines through a progression of educational opportunities for students, teachers and faculty.
 - Outcome 3: Build strategic partnerships and linkages between STEM formal and informal education providers that promote STEM literacy and awareness of NASA's mission.



NASA Education Future: Partnerships “Realizing the Vision!”



Education Portfolio Strategic Framework



Principles/
Criteria

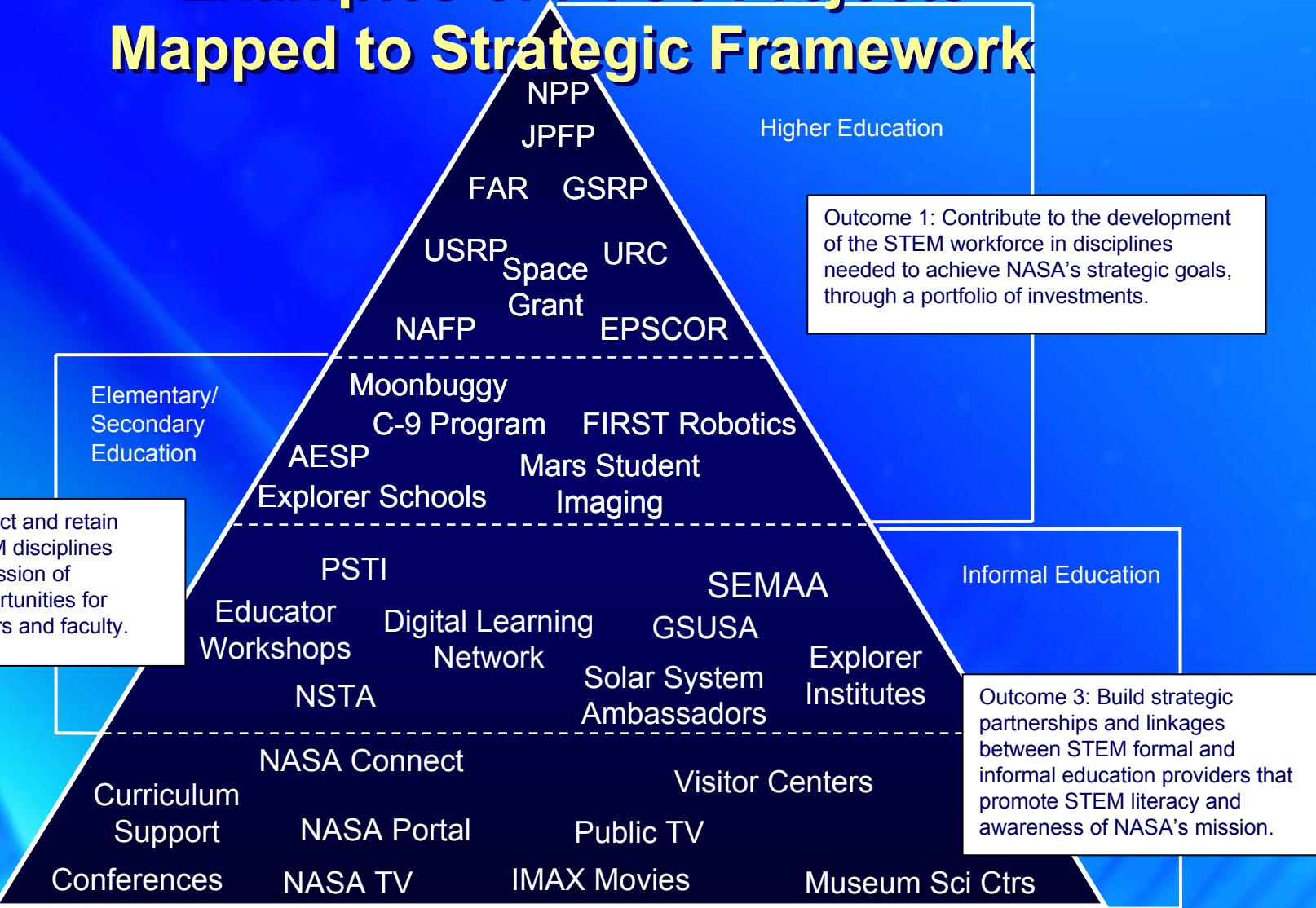
Relevance NASA Content Diversity Evaluation Continuity Partnerships/
Sustainability



NASA Education Future: Partnerships “Realizing the Vision!”



Examples of FY06 Projects Mapped to Strategic Framework





NASA Education Future: Partnerships “Realizing the Vision!”

Partnerships/Sustainability

Education investments leverage and achieve sustainability through their intrinsic design and the involvement of appropriate local, regional, and/or national partners in their design, development, or dissemination. As appropriate, key aspects of projects and activities are replicable, scalable, and demonstrate potential for continuation beyond the period of direct NASA funding.